

Considered

/AKS/ 7/9/2008

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/757,827
Applicants : M. ROSEN et al.
Filed : January 15, 2004
Title : Mesenchymal Stem Cells as a Vehicle for Ion Channel Transfer in Syncytial Structures
Confirmation No. : 5518
Art Unit : 1632
Examiner : Anoop Kumar SINGH
Docket No. : 13533/48003
Customer No. : 26646

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION UNDER 37 CFR 1.132

S I R:

I, Dr. Michael R. Rosen, do hereby declare:

1. I am a professor of Pharmacology and of Pediatrics at the College of Physicians and Surgeons, Columbia University. For over thirty-five years, I have devoted my research efforts to basic cardiovascular research. My curriculum vitae is attached as Exhibit A.
2. I am co-inventor of the subject matter disclosed and currently claimed in the above-identified patent application ("the '827 application"). The invention disclosed in the '827 application relates to methods and compositions for expressing a hyperpolarization-activated, cyclic nucleotide-gated (HCN) channel in a mammalian heart by engineering a mesenchymal stem cell (MSC) to express such a channel from an exogenous nucleic acid, and then delivering said MSCs to the mammalian heart. The HCN's properties enable it to spontaneously generate a